INSTALLATION & USER'S MANUAL

Showline

SL BAR 640 RGBW
LED Luminaire

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Version as of: **07 January 2013**

SL BAR 640 RGBW LED Luminaire Installation & User’s Manual

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IMPORTANT INFORMATION

Warnings and Notices

When using electrical equipment, basic safety precautions should always be followed including the following:

a. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**.

b. Do not use outdoors.

c. Do not mount near gas or electric heaters.

d. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

e. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

f. Do not use this equipment for other than intended use.

g. Refer service to qualified personnel.

SAVE THESE INSTRUCTIONS.

WARNING: You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. A qualified electrician must perform this installation.

WARNING: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

WARNING: This equipment is intended for installation in accordance with the National Electric Code® and local regulations. It is also intended for installation in indoor applications only. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

Additional Resources for DMX512

For more information on installing DMX512 control systems, the following publication is available for purchase from the United States Institute for Theatre Technology (USITT), "Recommended Practice for DMX512: A Guide for Users and Installers, 2nd edition" (ISBN: 9780955703522). USITT Contact Information:

USITT
315 South Crouse Avenue, Suite 200
Syracuse, NY 13210-1844
Phone: 1.800.938.7488 or 1.315.463.6463
www.usitt.org

Showline Limited Two-Year Warranty

Showline offers a two-year limited warranty of its luminaires against defects in materials or workmanship from the date of delivery. A copy of Showline two-year limited warranty containing specific terms and conditions can be obtained by contacting your local Showline office.

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PREFACE

1. About this Manual

The document provides installation and operation instructions for the following products:

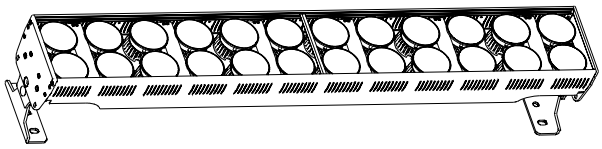
- SL BAR 640 RGBW LED Luminaire

Please read all instructions before installing or using this product. *Retain this manual for future reference*. Additional product information and descriptions may be found on the product specification sheet.

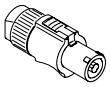
Note: The SL BAR 640 RGBW LED Luminaire is universal voltage 100 to 240 VAC (auto-ranging).

2. Included Items

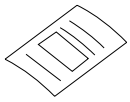
Each SL BAR 640 RGBW LED Luminaire includes the following items:



SL BAR 640 RGBW LED Luminaire



Neutrik PowerCon®
AC Input Connector



Unpack & Quick
Start Guide

Figure 1: Included Items

3. Accessories

SL BAR 640 RGBW LED Luminaire Power Input Cables (North American Models Only)

Part Number	Description
PC1BE	SL BAR 640 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Bare End* (*Note, user supplies and installs own AC input connector)
PC1GP	SL BAR 640 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Stagepin Connector
PC1GTL	SL BAR 640 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Twistlock Connector
PC1GR	SL BAR 640 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Edison Connector
PC3BE	SL BAR 640 RGBW LED Luminaire AC Power Input Cable (9.8 Feet / 3 meter), Powercon with Bare End* (*Note, user supplies and installs own AC input connector)
PC8BE	SL BAR 640 RGBW LED Luminaire AC Power Input Cable (26 Feet / 8 meter), Powercon with Bare End* (*Note, user supplies and installs own AC input connector)
PC8GR	SL BAR 640 RGBW LED Luminaire AC Power Input Cable (26 Feet / 8 meter), Powercon with Edison Connector

SL BAR 640 RGBW LED Luminaire Accessories

Part Number	Description
MC	Mega Claw, Black, Anodized
SC	Molded Yoke C-Clamp
HC	Light Weight Half Coupler
82003	Safety Cable

SL BAR 640 RGBW LED LUMINAIRE OVERVIEW

1. SL BAR 640 RGBW LED Luminaire Components

Major Luminaire Components

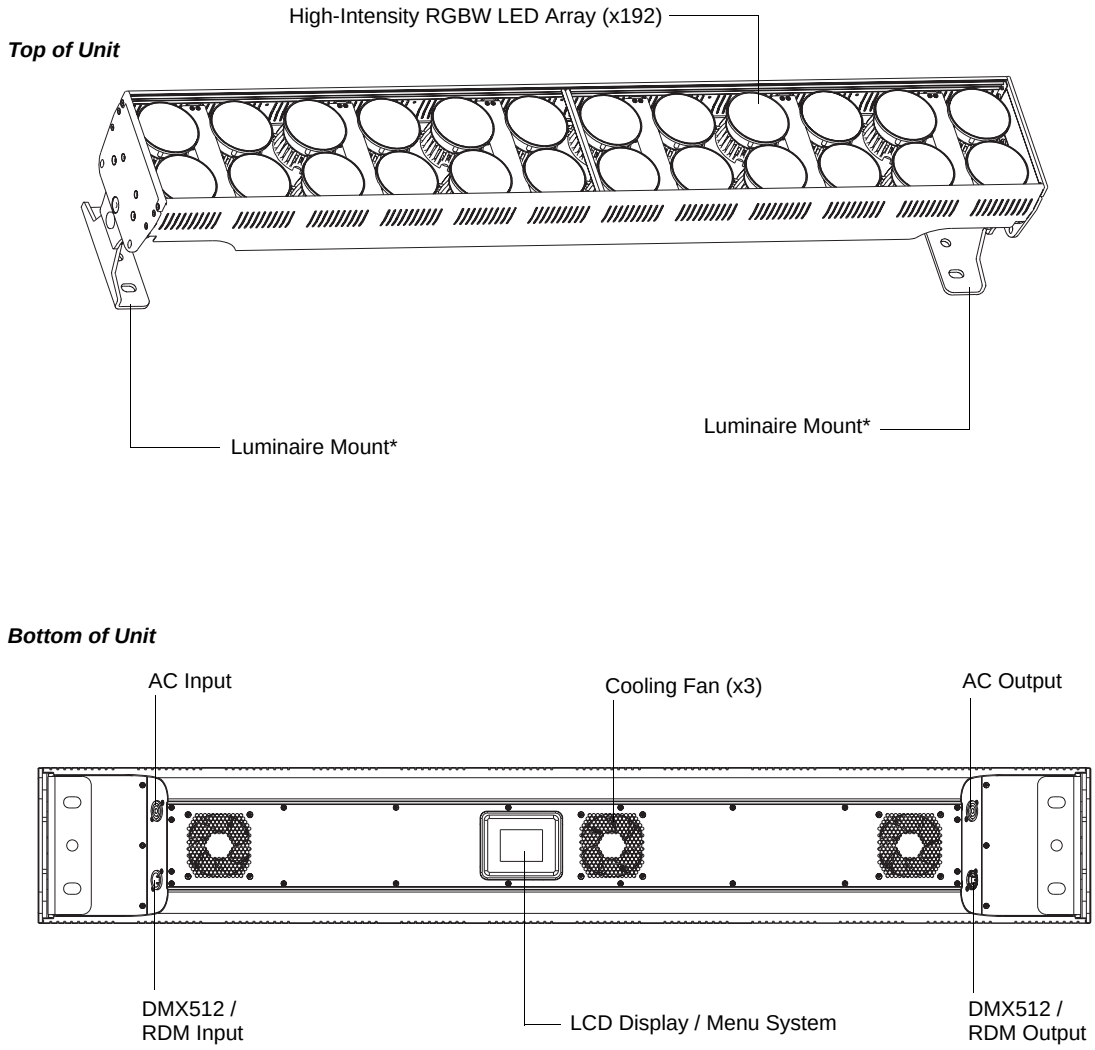
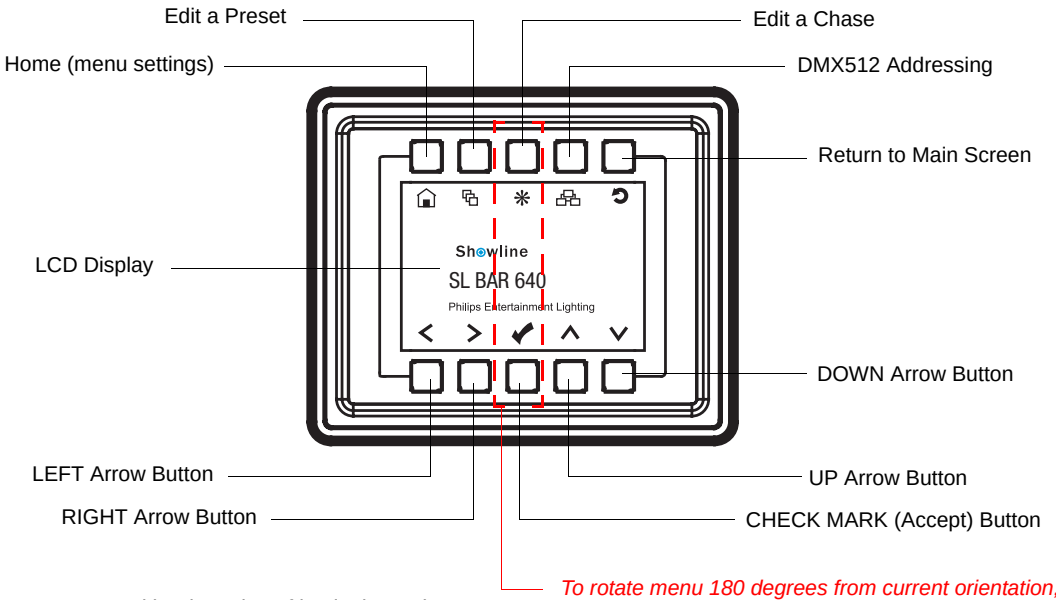


Figure 2: SL BAR 640 RGBW LED Luminaire Components

Note: *Mounts can be removed and reversed. See "Mounting Luminaire" on page 8 for more information

LCD Display / Menu System



NOTE: *Menu rotates with orientation of luminaire and menu buttons are always in the same position (with rotation of menu)*

Figure 3: LCD Display & Menu System

Note: For Menu operation and programming details, refer to "LCD Display and Menu System" on page 10.

INSTALLATION AND SET UP

1. Power Requirements

The SL BAR 640 RGBW LED Luminaire operates on AC input voltages from 100 to 240 VAC.

WARNING! This unit does not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from unit when not in use.

AC Power Operation

When connected to an AC source, the unit operates on 100 to 240 volts AC (+/- 10%, auto-ranging). The luminaire contains an auto-ranging power supply. Each luminaire can draw up to 500 Watts.

WARNING! Maximum amount of units that may be daisy-chained is (A) 4 units 100 ~ 120VAC (20 Amps) or (B) 9 units 230 ~ 240VAC (20 Amps). Refer to Table 1 for detailed information at various voltages.

Note: For wiring of AC input connector, refer to "Connecting SL BAR 640 RGBW LED Luminaires to AC Power" on page 7.

Table 1: SL BAR 640 RGBW LED Luminaire Voltage vs. Current

Voltage (AC)	Total Current (A)	Maximum number of units that can be linked together*
100	5.0	4
110	4.5	4
120	4.2	4
130	3.8	5
140	3.6	5
150	3.3	6
160	3.1	6
170	2.9	6

Voltage (AC)	Total Current (A)	Maximum number of units that can be linked together*
180	2.8	7
190	2.6	7
200	2.5	8
210	2.4	8
220	2.3	8
230	2.2	9
240	2.1	9

WARNING! *These figures are based on the Maximum Allowable Input Current of 20 Amps (and the maximum power supply limit of 500 Watts). ***Do not overload circuits!***

IMPORTANT AC POWER CONNECTION NOTES:

a. When using the daisy-chain connection method, ONLY connect SL BAR 640 RGBW LED Luminaires to AC Output Connection of SL BAR 640 RGBW LED Luminaires. ***DO NOT CONNECT OTHER TYPES OF LUMINAIRES OR DEVICES!***

b. Use only use approved cable types.

c. Do not overload circuits!

d. Do not connect SL BAR 640 RGBW LED Luminaires to dimmed circuits.

e. The MAXIMUM allowable number of SL BAR 640 RGBW LED Luminaires which can be 'daisy-chained' on one power feed are listed in Table 1, above. ***DO NOT EXCEED!***

2. Connecting Power

Units can be powered in one of two ways:

- Direct connection to a AC power source using an AC input cable. For wiring of AC input connector, refer to "Connecting SL BAR 640 RGBW LED Luminaires to AC Power" on page 7.
- Connection from the AC output of another SL BAR 640 RGBW LED Luminaire. When using this method, it is very important not to connect any other type of equipment device.

WARNING! Only connect other SL BAR 640 RGBW LED Luminaires to the AC Output (Thru) connector of a SL BAR 640 RGBW LED Luminaire.

Connecting SL BAR 640 RGBW LED Luminaires to AC Power

If the unit is supplied with an AC input cable without an input connector installed. The input connector is a user-supplied accessory.

Table 2 on page 7 describes how to connect power to your SL BAR 640 RGBW LED Luminaire. Field wiring of the SL BAR 640 RGBW LED Luminaire is straight forward. A total of 3 wires/conductors is supplied from the unit. The following wiring scheme is used:

Table 2: SL BAR 640 RGBW LED Luminaire (IP20 Rated Models) AC Input Connections

Wire Color	Purpose
Brown	Main / Line (100 to 240VAC)
Blue	Neutral
Green/Yellow	Ground (Earth)

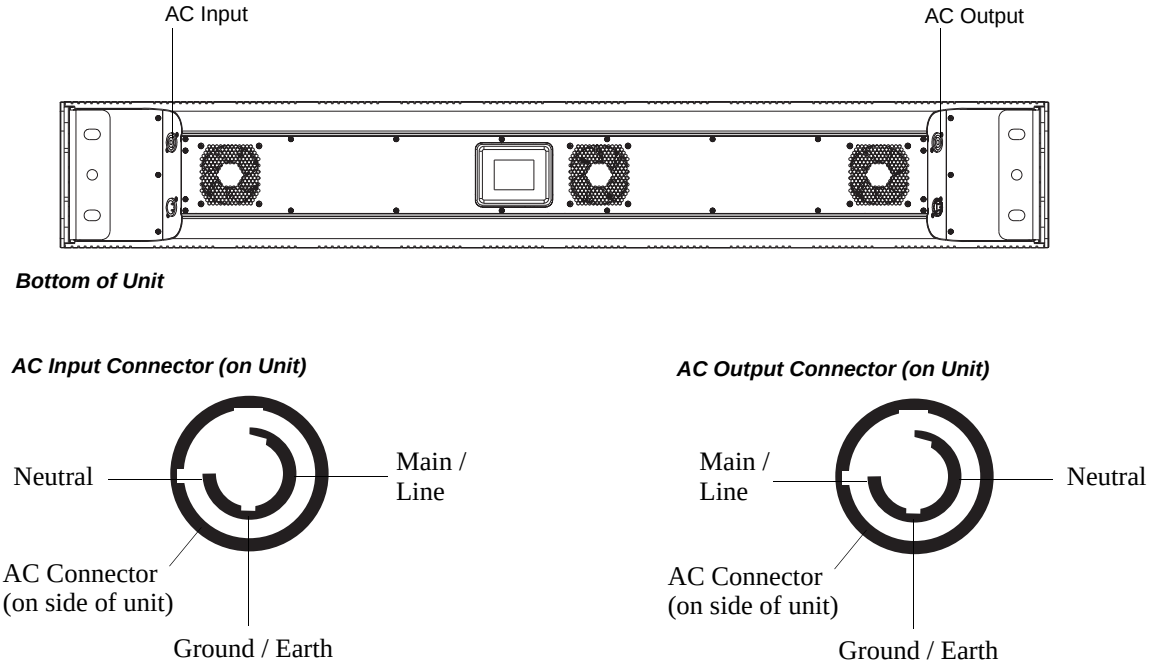


Figure 4: SL BAR 640 RGBW LED Luminaire AC Input & Output Connections

CAUTION: In the event the AC input cable of this luminaire is damaged, it must be replaced, by the user, with an approved cable through an Authorized Showline Dealer or Service Center.

3. Connecting to the DMX512 Network

Basic DMX512 installation consists of connecting multiple SL BAR 640 RGBW LED Luminaires together (up to 32 luminaires) in "daisy-chain" fashion. A cable runs from the control console (or DMX512 control source) to the DMX connector on the first SL BAR 640 RGBW LED Luminaire. Another cable runs from the other DMX connector on the first unit to a DMX connector on the next SL BAR 640 RGBW LED Luminaire (or DMX512 device to be controlled).

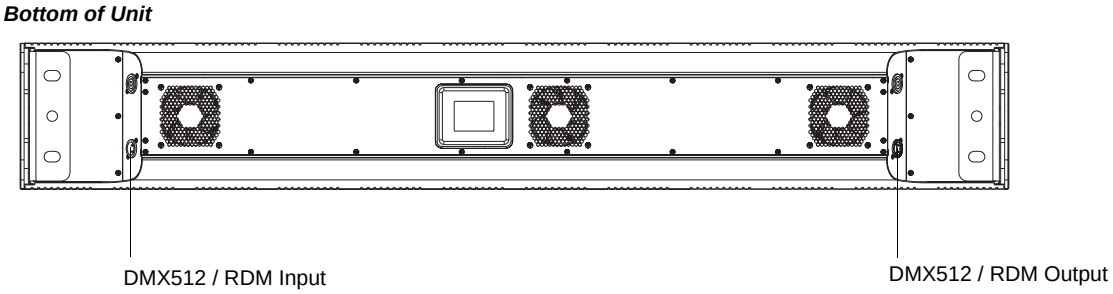
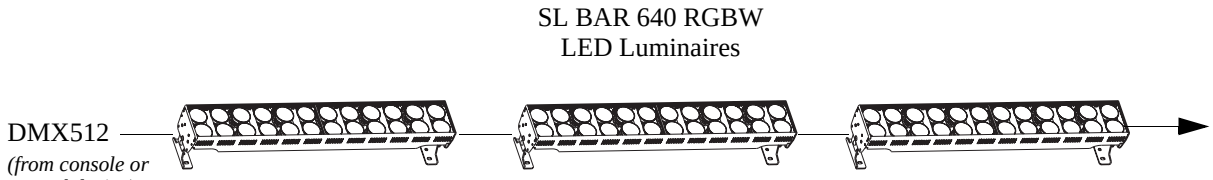


Figure 5: SL BAR 640 RGBW LED Luminaire DMX512 Input / Output Connections

Note: For more information on DMX512 networking and systems, refer to "Additional Resources for DMX512" on page 1. For SL BAR 640 RGBW LED Luminaire DMX Mapping, refer to "DMX CONTROL" on page 16.


SL BAR 640 RGBW
LED Luminaires
DMX512
(from console or control device)
DMX512 (out from first to second luminaire)
DMX512 (out to the next luminaire or DMX512 controlled device)

DMX512 Connections

DMX512 Signal	XLR Pin
Common (Drain)	1
DMX512 -	2
DMX512 +	3

Note: Remaining pins on each connector are not used.

Figure 6: SL BAR 640 RGBW LED Luminaire - DMX512 Connections

4. Mounting Luminaire

The SL BAR 640 RGBW LED Luminaire is provided with two mounts and safety cable anchor points.

The two mounts are easily removed and reversed as required. These mounts are designed to accept a variety of mounting hooks, clamps, etc. for hanging applications or can be set on the mounts for floor applications. Refer to

Figure 7 for additional information. *Note, the bottom of the luminaire must be free and clear of any objects (i.e., scenery) to allow for proper airflow.*

Simply attach hook, clamp, etc. to the SL BAR 640 RGBW LED Luminaire mount assembly in the M13 hole.

Note: Mounting hooks, clamps, etc. are sold separately or by others. For available mounting accessories refer to "Accessories" on page 3.

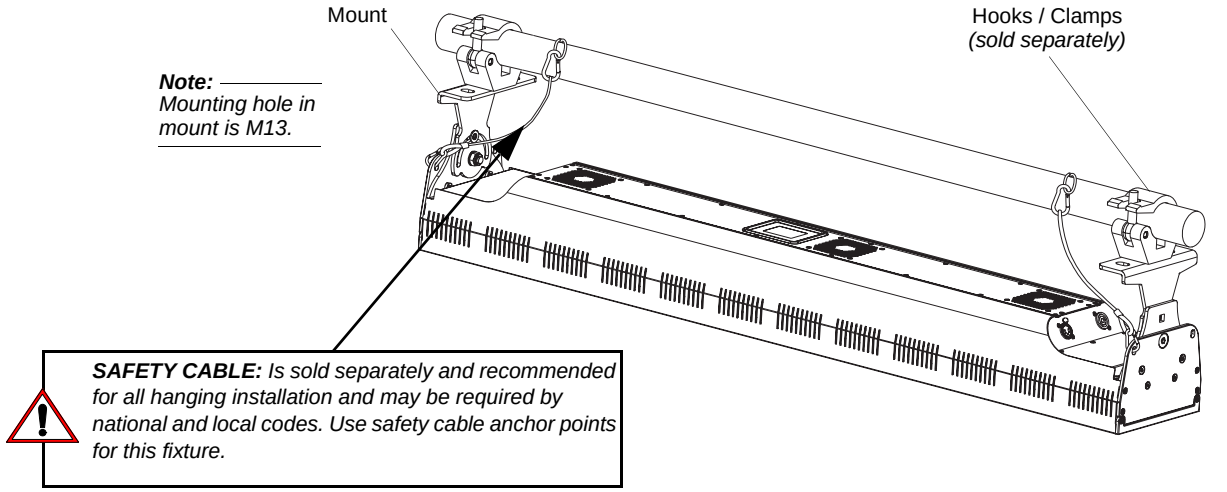

Mount
Hooks / Clamps
(sold separately)
Note:
Mounting hole in mount is M13.
SAFETY CABLE: Is sold separately and recommended for all hanging installation and may be required by national and local codes. Use safety cable anchor points for this fixture.

Figure 7: Mounting Luminaire - Hanging Applications

OPERATION AND PROGRAMMING

1. LCD Display and Menu System

The SL BAR 640 RGBW LED Luminaire's LCD Display and Menu System provides local control for accessing the following fixture's settings:

- Presets (Standard and User Defined)
- Color Filters
- Effects (Chases - preloaded and user defined)
- Strobe / Timing
- Fixture Settings
- Fixture Lockout (to prevent changes)
- Password Setting
- Current Fixture Operational Status
- Setting the DMX512 Address

Note: If there are multiple luminaires in a system, changes would need to be made at each LCD Menu as desired.

Upon power up, the LCD will display the main screen showing the product type/name. If DMX is enabled, the programmed address will appear after power up.

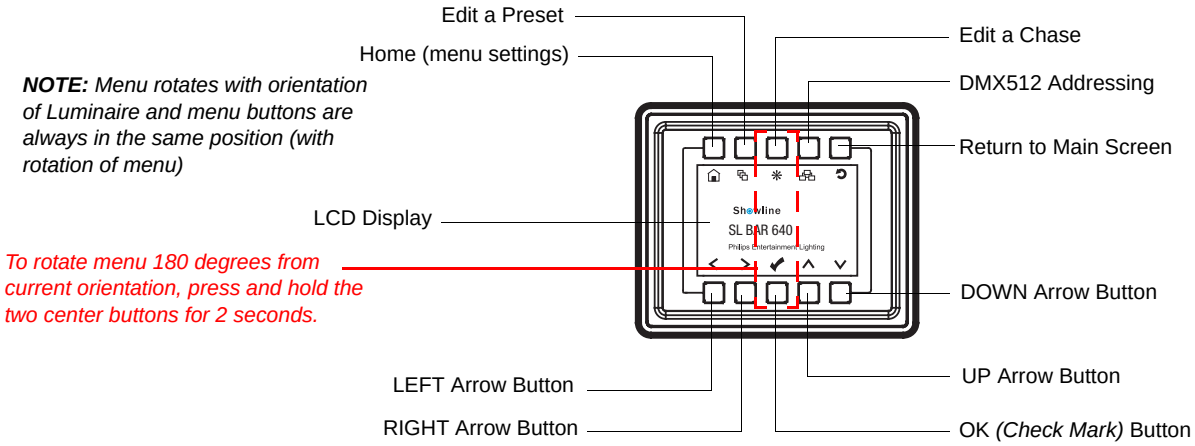

Edit a Preset
Home (menu settings)
NOTE: Menu rotates with orientation of Luminaire and menu buttons are always in the same position (with rotation of menu)
LCD Display
To rotate menu 180 degrees from current orientation, press and hold the two center buttons for 2 seconds.
LEFT Arrow Button
RIGHT Arrow Button
Edit a Chase
DMX512 Addressing
Return to Main Screen
DOWN Arrow Button
UP Arrow Button
OK (Check Mark) Button
Showline
SL BAR 640

Figure 8: LCD Display and Menu System

2. LCD Display and Menu System Operation

The LCD Display Menu system consists of several categories. Use the Menu Buttons to access and make changes to the menu items. When the desired menu item is reached, press the desired Menu Button to display the menu options and to navigate and configure the menu options as required.

To navigate and access menu settings/selections:

Step 1. Make sure unit is powered and turned on.

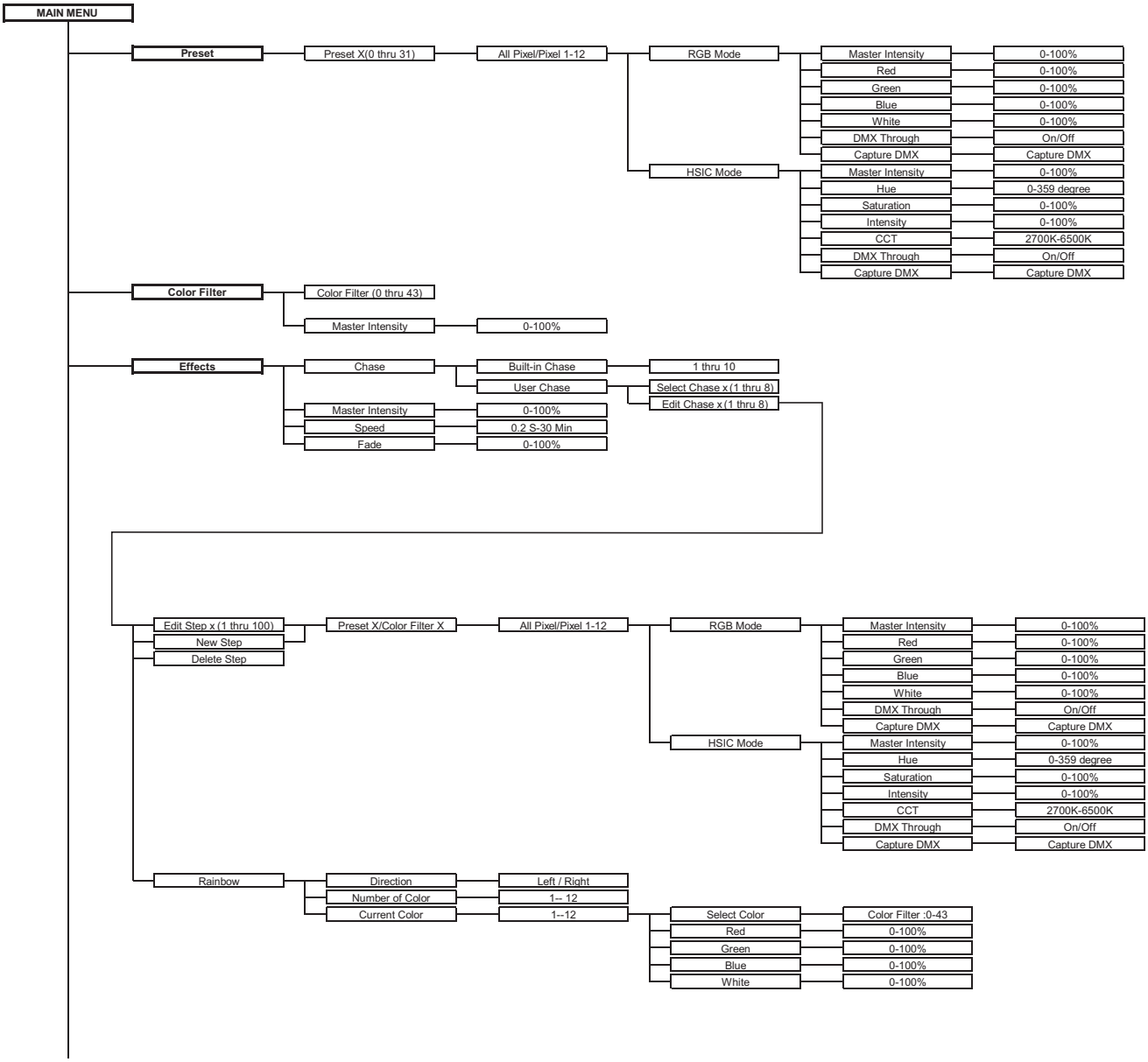
Step 2. Press the desired button (as shown in **Figure 8**) to access menu categories.

Step 3. Use UP | DOWN | LEFT | RIGHT arrow buttons to navigate through the various options and settings.

Step 4. Make changes as desired.

Step 5. Press CHECK MARK (OK) button to accept changes.

SL BAR 640 RGBW LED Luminaire Menu Tree (Part 1)



Continued next page

Figure 9: SL BAR 640 RGBW LED Luminaire Menu Tree (Part 1)

SL BAR 640 RGBW LED Luminaire Menu Tree (Part 2)

Continued from previous page

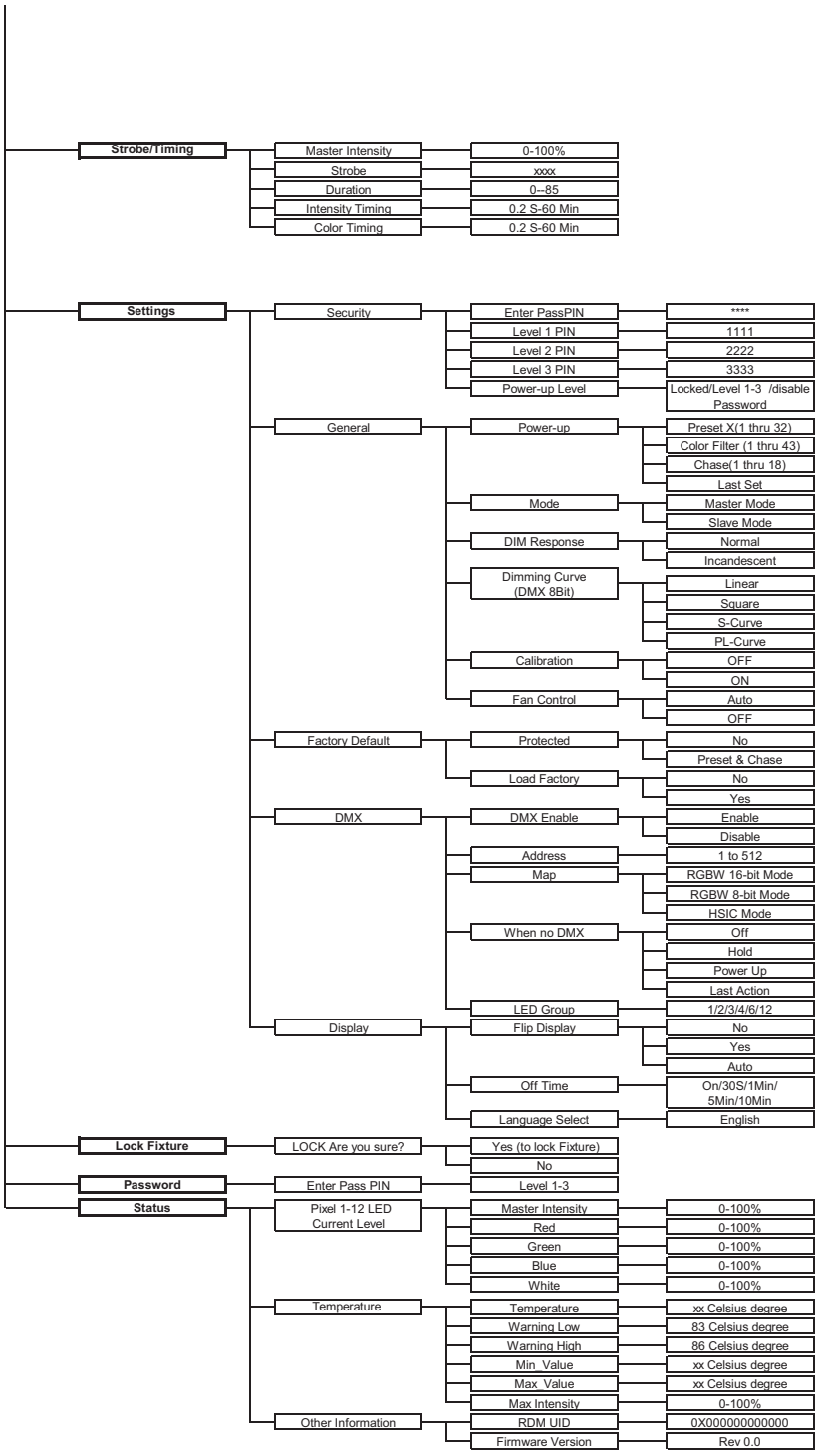


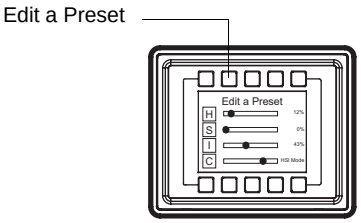
Figure 10: SL BAR 640 RGBW LED Luminaire Menu Tree (Part 2)

3. Quick Selection Buttons

When in Manual Mode, the SL BAR 640 RGBW LED Luminaire's features can be accessed via the on-board LCD menu system or via three quick select buttons:

- Edit a Preset Button
- Edit a Chase Button
- DMX Address Button

Edit a Preset Button



To edit and save a preset:

Step 1. Press Edit a Preset button. Current preset will be shown.

Step 2. Use LEFT and RIGHT arrow buttons to scroll through all presets.

Step 3. Once at desired preset, use UP and DOWN arrows to access (highlight) preset parameters. Once in desired parameter, use LEFT and RIGHT arrow buttons to adjust parameter value as desired.

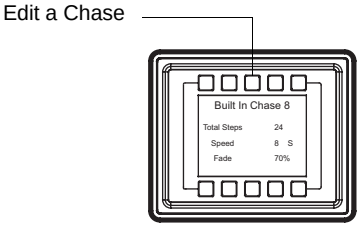
Step 4. Once all values are adjusted as desired, press OK (Check Mark) button.

Step 5. Save preset menu option will appear. Use LEFT and RIGHT arrow buttons to select preset number.

Step 6. If saving preset, press OK (Check Mark) button. Confirm choice.

Step 7. Preset is now saved.

Edit a Chase Button



To edit and save a chase:

Step 1. Press Edit a Chase button. Current chase will be shown.

Step 2. Use LEFT and RIGHT arrow buttons to scroll through all chases (Built In and User Chases).

Note: For Built In Chases, only the Speed and Fade parameters may be changed and saved. For User Chases, Chase Number, Total Steps, Speed, and Fade Parameters may be changed and saved.

Step 3. Once at desired chase, use UP and DOWN arrows to access (highlight) chase parameters. Once in desired parameter, use LEFT and RIGHT arrow buttons to adjust parameter value as desired.

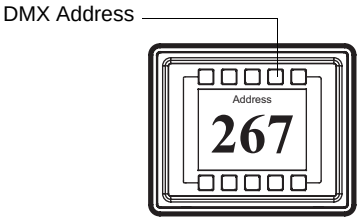
Step 4. Once all values are adjusted as desired, press OK (Check Mark) button.

Step 5. Save chase menu option will appear. Use LEFT and RIGHT arrow buttons to select chase number.

Step 6. If saving chase, press OK (Check Mark) button. Confirm choice.

Step 7. Chase is now saved.

DMX Address Button



To edit and save a DMX address:

Step 1. Press DMX Address button. Current DMX Address will be shown.

Step 2. Press OK (Check Mark) button to highlight a digit in the DMX address.

Step 3. Use LEFT and RIGHT arrow buttons to scroll through all digits.

Step 4. Once at desired digit, use UP and DOWN arrows to change highlighted digit. Once digit is set, use LEFT and RIGHT arrow buttons to set other digits in DMX address.

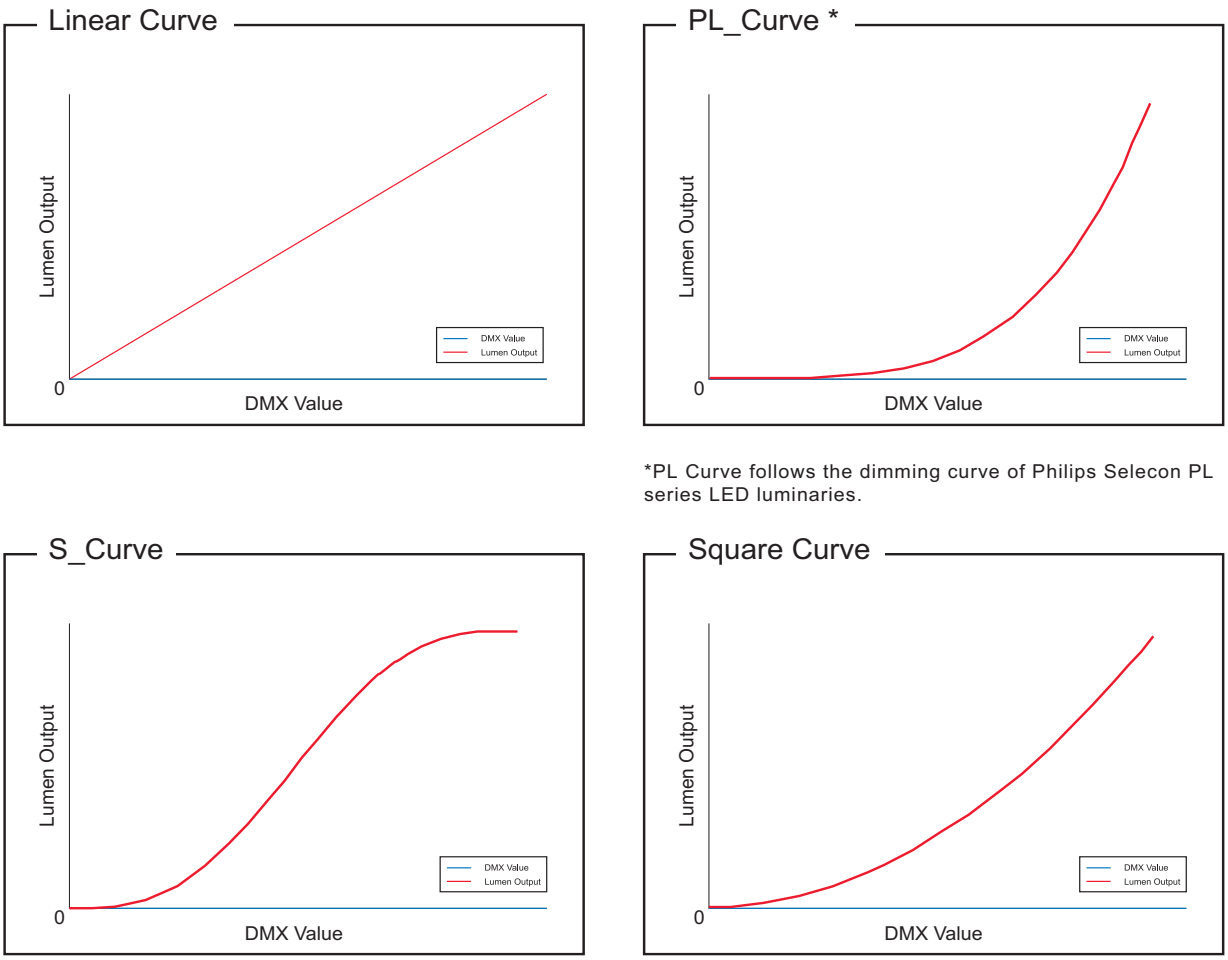
Step 5. Once all digits are set in DMX address, press OK (Check Mark) button.

Step 6. DMX will display and is saved.

4. Dimming Curve Selection

Through the menu, you are able to select one of four dimming curves:

- Linear Curve
- PL_Curve
- S_Curve
- Square Curve



*PL Curve follows the dimming curve of Philips Selecon PL series LED luminaries.

Figure 11: SL BAR 640 RGBW LED Luminaire Dimmer Curves

5. Master / Slave Operational Mode

The Master / Slave Operational Mode allows one SL BAR 640 RGBW LED Luminaire to act as the "Master" unit and all other connected units are controlled by this unit. When a unit is set to "Slave" mode, it will only listen to and follow any commands sent from a "Master" unit. Only one "Master" unit is allowed in this type of operation.

To setup a master / slave network:

Step 1. Set the first device in the DMX512 chain to Master Mode through the unit's menu system.

Step 2. Set all other connected units to Slave Mode.

Step 3. The master unit can be controlled via DMX512, RDM or through standalone operation (self-contained network utilizing on-board effects). The slave units will mimic the master unit's operation in all cases.

Note: For more information on DMX512 networking and systems, refer to "Additional Resources for DMX512" on page 1. For SL BAR 640 RGBW LED Luminaire DMX Mapping, refer to "DMX CONTROL" on page 16.

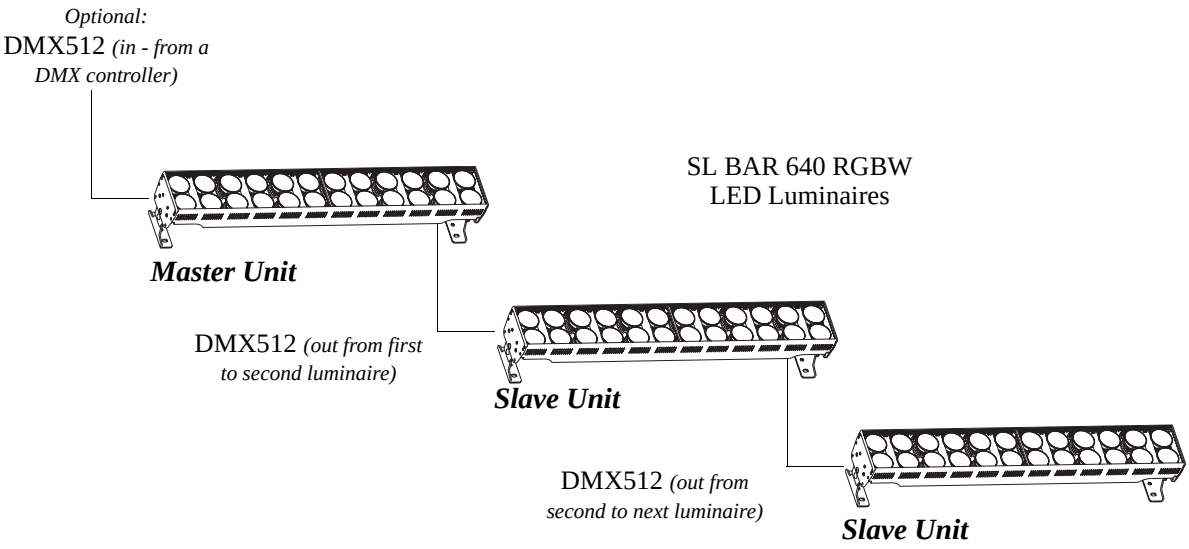

Optional:
DMX512 (in - from a DMX controller)
SL BAR 640 RGBW LED Luminaires
Master Unit
DMX512 (out from first to second luminaire)
Slave Unit
DMX512 (out from second to next luminaire)
Slave Unit

Figure 12: SL BAR 640 RGBW LED Luminaire - Master / Slave Configuration

DMX CONTROL

This section contains information for operating the luminaire using DMX control in 16-bit, 8-Bit, or HSIC (Hue, Saturation, Intensity and Color Correction) modes. For Menu options and detailed information, see "LCD Display and Menu System" on page 10.

Note: These tables assume a DMX start address of 1. When a different starting address is used, this address becomes channel 1 function and other functions follow in sequence.

1. 16-Bit Mode

Table 3 provides DMX channel mapping of all DMX512 control values when the SL BAR 640 RGBW LED Luminaire is in 16-bit DMX512 mode (as set by the luminaire's menu system).

Table 3: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)

DMX Channel	Parameter	Range DMX	Range%	**Default** - *recommended console default values*	Description
1	Master Intensity - High	0 - 65535	0 - 100%	0	16-bit control for Intensity of LED settings.
2	Master Intensity - Low				
3	Color Presets	0 - 255	0 - 100%	0	*Select presets, variable color filters or chases as follows:* Channel OFF (disabled) DMX 0 - 4 Preset 0 (OFF) DMX 5 - 6 Preset 1 DMX 7 - 8 Preset 2 DMX 9 - 10 Preset 3 DMX 11 - 12 Preset 4 DMX 13 - 14 Preset 5 DMX 15 - 16 Preset 6 DMX 17 - 18 Preset 7 DMX 19 - 20 Preset 8 DMX 21 - 22 Preset 9 DMX 23 - 24 Preset 10 DMX 25 - 26 Preset 11 DMX 27 - 28 Preset 12 DMX 29 - 30 Preset 13 DMX 31 - 32 Preset 14 DMX 33 - 34 Preset 15 DMX 35 - 36 Preset 16 DMX 37 - 38 Preset 17 DMX 39 - 40 Preset 18 DMX 41 - 42 Preset 19 DMX 43 - 44 Preset 20 DMX 45 - 46 Preset 21 DMX 47 - 48 Preset 22 DMX 49 - 50 Preset 23 DMX 51 - 52 Preset 24 DMX 53 - 54 Preset 25 DMX 55 - 56 Preset 26 DMX 57 - 58 Preset 27 DMX 59 - 60 Preset 28 DMX 61 - 62 Preset 29 DMX 63 - 64 Preset 30 DMX 65 - 66 Preset 31 DMX 67 - 68 CF_0_Color OFF DMX 69 - 70 CF_1_White 10000K DMX 71 - 72 CF_2_White 8000K DMX 73 - 74 CF_3_White 6500K DMX 75 - 76 CF_4_White 5600K DMX 77 - 78 CF_5_White 5000K DMX 79 - 80 CF_6_White 4500K DMX 81 - 82 CF_7_White 4000K DMX 83 - 84 CF_8_White 3200K DMX 85 - 86 CF_9_White 3000K DMX 87 - 88 CF_10_White 2700K DMX 89 - 90 ***CONTINUED NEXT PAGE***

Table 3: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)

3	Color Presets	0 - 255	0 - 100%	0	***CONTINUED FROM PREVIOUS PAGE*** CF_11_Moroccan Pink DMX 91 - 92 CF_12_Pink DMX 93 - 94 CF_13_Flesh Pink DMX 95 - 96 CF_14_Bright Rose DMX 97 - 98 CF_15_Follies Pink DMX 99 - 100 CF_16_Fuchsia Pink DMX 101 - 102 CF_17_Surprise Pink DMX 103 - 104 CF_18_Congo Blue DMX 105 - 106 CF_19_Blue DMX 107 - 108 CF_20_Virgin Blue DMX 109 - 110 CF_21_Midnight Maya DMX 111 - 112 CF_22_Double C.T Blue DMX 113 - 114 CF_23_Slate Blue DMX 115 - 116 CF_24_Regal Blue DMX 117 - 118 CF_25_Full C.T Blue DMX 119 - 120 CF_26_Steel Blue DMX 121 - 122 CF_27_Lighter Blue DMX 123 - 124 CF_28_Cyan DMX 125 - 126 CF_29_Marine Blue DMX 127 - 128 CF_30_Soft Green DMX 129 - 130 CF_31_Moss Green DMX 131 - 132 CF_32_Green DMX 133 - 134 CF_33_Fem Green DMX 135 - 136 CF_34_JAS Green DMX 137 - 138 CF_35_Pale Green DMX 139 - 140 CF_36_Spring Yellow DMX 141 - 142 CF_37_Yellow DMX 143 - 144 CF_38_Deep Amber DMX 145 - 146 CF_39_Chrome Orange DMX 147 - 148 CF_40_Orange DMX 149 - 150 CF_41_Magenta DMX 151 - 152 CF_42_Flame Red DMX 153 - 154 CF_43_Purple DMX 155 - 156 Rotate CW Fast -> Slow DMX 157 - 171 Rotate ACW Slow -> Fast DMX 172 - 186 Random Color Fast -> Slow DMX 187 - 201 Chase1 DMX 202 - 204 Chase2 DMX 205 - 207 Chase3 DMX 208 - 210 Chase4 DMX 211 - 213 Chase5 DMX 214 - 216 Chase6 DMX 217 - 219 Chase7 DMX 220 - 222 Chase8 DMX 223 - 225 Chase9 DMX 226 - 228 Chase10 DMX 229 - 231 User Chase1 DMX 232 - 234 User Chase2 DMX 235 - 237 User Chase3 DMX 238 - 240 User Chase4 DMX 241 - 243 User Chase5 DMX 244 - 246 User Chase6 DMX 247 - 249 User Chase7 DMX 250 - 252 User Chase8 DMX 253 - 255
4	Strobe	0 - 255	0 - 100%	0	*Controls strobe operations as follows:* Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 128 - 129 Pulse + Med Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 192 - 193 Pulse - Med Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
5	Duration	0 - 255	0 - 100%	0	Strobe Duration is 0 - 85 0 = DMX 0 1 = DMX 1 - 3 x = (DMX Value-1)/3+1 85 = DMX 253-255

Table 3: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)

6	Intensity Timing	0 - 255	0 - 100%	255	Allows for timing control of intensity. Channel should default to 255 for smoothest actions using console and/or manual fades.
7	Color Timing	0 - 255	0 - 100%	255	Allows for timing control of colors. Channel should default to 255 for smoothest actions using console and/or manual fades.
8	Control	0 - 255	0 - 100%	0	*Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds, then turn to 0. Set control channel value to 0 without any scaling.* Default Setting on Console = DMX 0-4 DIM Response _Normal = DMX 5 - 9 DIM Response_Incandescent = DMX 10 - 14 Dimming Curve_linear = DMX 30 - 34 Dimming Curve_Square = DMX 35- 39 Dimming Curve_S-Curve = DMX 40 - 44 Dimming Curve_PL-Curve = DMX 45 - 49 Calibration_OFF = DMX 70 - 74 Calibration_ON = DMX 75 - 79 Fan_Auto = DMX 80 - 84 Fan_Off = DMX 85 - 89 Reserved (Future use) = DMX 90 - 250
9	Red 1-12, High Byte	0 - 65535	0 - 100%	0	16-bit control for of Red LEDs 0 to full.
10	Red 1-12, Low Byte				
11	Green 1-12, High Byte	0 - 65535	0 - 100%	0	16-bit control for of Green LEDs 0 to full.
12	Green 1-12, Low Byte				
13	Blue 1-12, High Byte	0 - 65535	0 - 100%	0	16-bit control for of Blue LEDs 0 to full.
14	Blue 1-12, Low Byte				
15	White 1-12, High Byte	0 - 65535	0 - 100%	0	16-bit control for of White LEDs 0 to full.
16	White 1-12, Low Byte				

2. 16-Bit Group Modes

Table 4 provides DMX channel mapping of all DMX512 control values when the SL BAR 640 RGBW LED Luminaire is operated in various 16-bit DMX512 Group Control Modes.

Table 4: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (16-Bit Group Modes)

RGBW 16 BIT MODE						
DMX CHANNEL	12 Group MODE	6 Group MODE	4 Group MODE	3 Group MODE	2 Group MODE	1 Group MODE
1	Master Intensity - High	Master Intensity - High	Master Intensity - High	Master Intensity - High	Master Intensity - High	Master Intensity - High
2	Master Intensity - Low	Master Intensity - Low	Master Intensity - Low	Master Intensity - Low	Master Intensity - Low	Master Intensity - Low
3	Color Presets	Color Presets	Color Presets	Color Presets	Color Presets	Color Presets
4	Strobe	Strobe	Strobe	Strobe	Strobe	Strobe
5	Duration	Duration	Duration	Duration	Duration	Duration
6	Intensity Timing	Intensity Timing	Intensity Timing	Intensity Timing	Intensity Timing	Intensity Timing
7	Color Timing	Color Timing	Color Timing	Color Timing	Color Timing	Color Timing
8	Control	Control	Control	Control	Control	Control
9	Red_1 - High Byte	Red_1-2 - High Byte	Red_1-3 - High Byte	Red_1-4 - High Byte	Red_1-6 - High Byte	Red_1-12 - High Byte
10	Red_1 - Low Byte	Red_1-2 - Low Byte	Red_1-3 - Low Byte	Red_1-4 - Low Byte	Red_1-6 - Low Byte	Red_1-12 - Low Byte
11	Green_1 - High Byte	Green_1-2 - High Byte	Green_1-3 - High Byte	Green_1-4 - High Byte	Green_1-6 - High Byte	Green_1-12 - High Byte
12	Green_1 - Low Byte	Green_1-2 - Low Byte	Green_1-3 - Low Byte	Green_1-4 - Low Byte	Green_1-6 - Low Byte	Green_1-12 - Low Byte
13	Blue_1 - High Byte	Blue_1-2 - High Byte	Blue_1-3 - High Byte	Blue_1-4 - High Byte	Blue_1-6 - High Byte	Blue_1-12 - High Byte
14	Blue_1 - Low Byte	Blue_1-2 - Low Byte	Blue_1-3 - Low Byte	Blue_1-4 - Low Byte	Blue_1-6 - Low Byte	Blue_1-12 - Low Byte
15	White_1 - High Byte	White_1-2 - High Byte	White_1-3 - High Byte	White_1-4 - High Byte	White_1-6 - High Byte	White_1-12 - High Byte
16	White_1 - Low Byte	White_1-2 - Low Byte	White_1-3 - Low Byte	White_1-4 - Low Byte	White_1-6 - Low Byte	White_1-12 - Low Byte
17	Red_2 - High Byte	Red_3-4 - High Byte	Red_4-6 - High Byte	Red_5-8 - High Byte	Red_7-12 - High Byte	
18	Red_2 - Low Byte	Red_3-4 - Low Byte	Red_4-6 - Low Byte	Red_5-8 - Low Byte	Red_7-12 - Low Byte	
19	Green_2 - High Byte	Green_3-4 - High Byte	Green_4-6 - High Byte	Green_5-8 - High Byte	Green_7-12 - High Byte	
20	Green_2 - Low Byte	Green_3-4 - Low Byte	Green_4-6 - Low Byte	Green_5-8 - Low Byte	Green_7-12 - Low Byte	
21	Blue_2 - High Byte	Blue_3-4 - High Byte	Blue_4-6 - High Byte	Blue_5-8 - High Byte	Blue_7-12 - High Byte	
22	Blue_2 - Low Byte	Blue_3-4 - Low Byte	Blue_4-6 - Low Byte	Blue_5-8 - Low Byte	Blue_7-12 - Low Byte	
23	White_2 - High Byte	White_3-4 - High Byte	White_4-6 - High Byte	White_5-8 - High Byte	White_7-12 - High Byte	
24	White_2 - Low Byte	White_3-4 - Low Byte	White_4-6 - Low Byte	White_5-8 - Low Byte	White_7-12 - Low Byte	
25	Red_3 - High Byte	Red_5-6 - High Byte	Red_7-9 - High Byte	Red_9-12 - High Byte		
26	Red_3 - Low Byte	Red_5-6 - Low Byte	Red_7-9 - Low Byte	Red_9-12 - Low Byte		
27	Green_3 - High Byte	Green_5-6 - High Byte	Green_7-9 - High Byte	Green_9-12 - High Byte		
28	Green_3 - Low Byte	Green_5-6 - Low Byte	Green_7-9 - Low Byte	Green_9-12 - Low Byte		
29	Blue_3 - High Byte	Blue_5-6 - High Byte	Blue_7-9 - High Byte	Blue_9-12 - High Byte		
30	Blue_3 - Low Byte	Blue_5-6 - Low Byte	Blue_7-9 - Low Byte	Blue_9-12 - Low Byte		
31	White_3 - High Byte	White_5-6 - High Byte	White_7-9 - High Byte	White_9-12 - High Byte		
32	White_3 - Low Byte	White_5-6 - Low Byte	White_7-9 - Low Byte	White_9-12 - Low Byte		
33	Red_4 - High Byte	Red_7-8 - High Byte	Red_10-12 - High Byte			
34	Red_4 - Low Byte	Red_7-8 - Low Byte	Red_10-12 - Low Byte			
35	Green_4 - High Byte	Green_7-8 - High Byte	Green_10-12 - High Byte			
36	Green_4 - Low Byte	Green_7-8 - Low Byte	Green_10-12 - Low Byte			
37	Blue_4 - High Byte	Blue_7-8 - High Byte	Blue_10-12 - High Byte			
38	Blue_4 - Low Byte	Blue_7-8 - Low Byte	Blue_10-12 - Low Byte			
39	White_4 - High Byte	White_7-8 - High Byte	White_10-12 - High Byte			
40	White_4 - Low Byte	White_7-8 - Low Byte	White_10-12 - Low Byte			
41	Red_5 - High Byte	Red_9-10 - High Byte				
42	Red_5 - Low Byte	Red_9-10 - Low Byte				
43	Green_5 - High Byte	Green_9-10 - High Byte				
44	Green_5 - Low Byte	Green_9-10 - Low Byte				
45	Blue_5 - High Byte	Blue_9-10 - High Byte				
46	Blue_5 - Low Byte	Blue_9-10 - Low Byte				
47	White_5 - High Byte	White_9-10 - High Byte				
48	White_5 - Low Byte	White_9-10 - Low Byte				
49	Red_6 - High Byte	Red_11-12 - High Byte				
50	Red_6 - Low Byte	Red_11-12 - Low Byte				
51	Green_6 - High Byte	Green_11-12 - High Byte				
52	Green_6 - Low Byte	Green_11-12 - Low Byte				
53	Blue_6 - High Byte	Blue_11-12 - High Byte				
54	Blue_6 - Low Byte	Blue_11-12 - Low Byte				
55	White_6 - High Byte	White_11-12 - High Byte				
56	White_6 - Low Byte	White_11-12 - Low Byte				
57	Red_7 - High Byte					
58	Red_7 - Low Byte					
59	Green_7 - High Byte					
60	Green_7 - Low Byte					
61	Blue_7 - High Byte					
62	Blue_7 - Low Byte					
63	White_7 - High Byte					
64	White_7 - Low Byte					
65	Red_8 - High Byte					
66	Red_8 - Low Byte					
67	Green_8 - High Byte					
68	Green_8 - Low Byte					
69	Blue_8 - High Byte					
70	Blue_8 - Low Byte					
71	White_8 - High Byte					
72	White_8 - Low Byte					
73	Red_9 - High Byte					
74	Red_9 - Low Byte					
75	Green_9 - High Byte					
76	Green_9 - Low Byte					
77	Blue_9 - High Byte					
78	Blue_9 - Low Byte					
79	White_9 - High Byte					
80	White_9 - Low Byte					
81	Red_10 - High Byte					
82	Red_10 - Low Byte					
83	Green_10 - High Byte					
84	Green_10 - Low Byte					
85	Blue_10 - High Byte					
86	Blue_10 - Low Byte					
87	White_10 - High Byte					
88	White_10 - Low Byte					
89	Red_11 - High Byte					
90	Red_11 - Low Byte					
91	Green_11 - High Byte					
92	Green_11 - Low Byte					
93	Blue_11 - High Byte					
94	Blue_11 - Low Byte					
95	White_11 - High Byte					
96	White_11 - Low Byte					
97	Red_12- High Byte					
98	Red_12 - Low Byte					
99	Green_12 - High Byte					
100	Green_12 - Low Byte					
101	Blue_12 - High Byte					
102	Blue_12 - Low Byte					
103	White_12 - High Byte					
104	White_12 - Low Byte					

Note:
Refer to previous DMX mapping information for Color Presets, Strobe, Duration, Intensity Timing, Color Timing, and Control channels.

3. 8-Bit Mode

Table 5 provides DMX channel mapping of all DMX512 control values when the SL BAR 640 RGBW LED Luminaire is in 8-bit DMX512 mode (as set by the luminaire's menu system).

Table 5: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (8-Bit Mode)

DMX Channel	Parameter	Range DMX	Range%	**Default** - *recommended console default values*	Description
1	Master Intensity	0 - 255	0 - 100%	0	8-bit control for Intensity of LED settings.
2	Color Presets	0 - 255	0 - 100%	0	*Select presets, variable color filters or chases as follows:* Channel OFF (disabled) DMX 0 - 4 Preset 0 (OFF) DMX 5 - 6 Preset 1 DMX 7 - 8 Preset 2 DMX 9 - 10 Preset 3 DMX 11 - 12 Preset 4 DMX 13 - 14 Preset 5 DMX 15 - 16 Preset 6 DMX 17 - 18 Preset 7 DMX 19 - 20 Preset 8 DMX 21 - 22 Preset 9 DMX 23 - 24 Preset 10 DMX 25 - 26 Preset 11 DMX 27 - 28 Preset 12 DMX 29 - 30 Preset 13 DMX 31 - 32 Preset 14 DMX 33 - 34 Preset 15 DMX 35 - 36 Preset 16 DMX 37 - 38 Preset 17 DMX 39 - 40 Preset 18 DMX 41 - 42 Preset 19 DMX 43 - 44 Preset 20 DMX 45 - 46 Preset 21 DMX 47 - 48 Preset 22 DMX 49 - 50 Preset 23 DMX 51 - 52 Preset 24 DMX 53 - 54 Preset 25 DMX 55 - 56 Preset 26 DMX 57 - 58 Preset 27 DMX 59 - 60 Preset 28 DMX 61 - 62 Preset 29 DMX 63 - 64 Preset 30 DMX 65 - 66 Preset 31 DMX 67 - 68 CF_0_Color OFF DMX 69 - 70 CF_1_White 10000K DMX 71 - 72 CF_2_White 8000K DMX 73 - 74 CF_3_White 6500K DMX 75 - 76 CF_4_White 5600K DMX 77 - 78 CF_5_White 5000K DMX 79 - 80 CF_6_White 4500K DMX 81 - 82 CF_7_White 4000K DMX 83 - 84 CF_8_White 3200K DMX 85 - 86 CF_9_White 3000K DMX 87 - 88 CF_10_White 2700K DMX 89 - 90 CF_11_Moroccan Pink DMX 91 - 92 CF_12_Pink DMX 93 - 94 CF_13_Flesh Pink DMX 95 - 96 CF_14_Bright Rose DMX 97 - 98 CF_15_Follies Pink DMX 99 - 100 CF_16_Fuchsia Pink DMX 101 - 102 CF_17_Surprise Pink DMX 103 - 104 CF_18_Congo Blue DMX 105 - 106 CF_19_Blue DMX 107 - 108 CF_20_Virgin Blue DMX 109 - 110 CF_21_Midnight Maya DMX 111 - 112 CF_22_Double C.T Blue DMX 113 - 114 CF_23_Slate Blue DMX 115 - 116 CF_24_Regal Blue DMX 117 - 118 CF_25_Full C.T Blue DMX 119 - 120 CF_26_Steel Blue DMX 121 - 122 CF_27_Lighter Blue DMX 123 - 124 CF_28_Cyan DMX 125 - 126 ***CONTINUED NEXT PAGE***

Table 5: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (8-Bit Mode)

2	Color Presets	0 - 255	0 - 100%	0	***CONTINUED FROM PREVIOUS PAGE*** CF_29_Marine Blue DMX 127 - 128 CF_30_Soft Green DMX 129 - 130 CF_31_Moss Green DMX 131 - 132 CF_32_Green DMX 133 - 134 CF_33_Fem Green DMX 135 - 136 CF_34_JAS Green DMX 137 - 138 CF_35_Pale Green DMX 139 - 140 CF_36_Spring Yellow DMX 141 - 142 CF_37_Yellow DMX 143 - 144 CF_38_Deep Amber DMX 145 - 146 CF_39_Chrome Orange DMX 147 - 148 CF_40_Orange DMX 149 - 150 CF_41_Magenta DMX 151 - 152 CF_42_Flame Red DMX 153 - 154 CF_43_Purple DMX 155 - 156 Rotate CW Fast -> Slow DMX 157 - 171 Rotate ACW Slow -> Fast DMX 172 - 186 Random Color Fast -> Slow DMX 187 - 201 Chase1 DMX 202 - 204 Chase2 DMX 205 - 207 Chase3 DMX 208 - 210 Chase4 DMX 211 - 213 Chase5 DMX 214 - 216 Chase6 DMX 217 - 219 Chase7 DMX 220 - 222 Chase8 DMX 223 - 225 Chase9 DMX 226 - 228 Chase10 DMX 229 - 231 User Chase1 DMX 232 - 234 User Chase2 DMX 235 - 237 User Chase3 DMX 238 - 240 User Chase4 DMX 241 - 243 User Chase5 DMX 244 - 246 User Chase6 DMX 247 - 249 User Chase7 DMX 250 - 252 User Chase8 DMX 253 - 255
3	Strobe	0 - 255	0 - 100%	0	*Controls strobe operations as follows:* Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 128 - 129 Pulse + Med Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 192 - 193 Pulse - Med Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
4	Duration	0 - 255	0 - 100%	0	Strobe Duration is 0 - 85 0 = DMX 0 1 = DMX 1 - 3 x = (DMX Value-1)/3+1 85 = DMX 253-255
5	Timing	0 - 255	0 - 100%	255	Allows for timing control of intensity and color parameters. Channel should default to 255 for smoothest actions using console and/or manual fades

Table 5: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (8-Bit Mode)

6	Control	0 - 255	0 - 100%	0	*Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds, then turn to 0. Set control channel value to 0 without any scaling.* Default Setting on Console = DMX 0-4 DIM Response _Normal = DMX 5 - 9 DIM Response_Incandescent = DMX 10 - 14 Dimming Curve_linear = DMX 30 - 34 Dimming Curve_Square = DMX 35- 39 Dimming Curve_S-Curve = DMX 40 - 44 Dimming Curve_PL-Curve = DMX 45 - 49 Calibration_OFF = DMX 70 - 74 Calibration_ON = DMX 75 - 79 Fan_Auto = DMX 80 - 84 Fan_Off = DMX 85 - 89 Reserved (Future use) = DMX 90 - 250
7	Red 1-12	0 - 255	0 - 100%	0	8-bit control of Red LEDs.
8	Green 1-12	0 - 255	0 - 100%	0	8-bit control of Green LEDs.
9	Blue 1-12	0 - 255	0 - 100%	0	8-bit control of Blue LEDs.
10	White 1-12	0 - 255	0 - 100%	0	8-bit control of White LEDs.

4. 8-Bit Group Modes

Table 4 provides DMX channel mapping of all DMX512 control values when the SL BAR 640 RGBW LED Luminaire is operated in various 8-bit DMX512 Group Control Modes.

Table 6: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (8-Bit Group Modes)

RGBW 8 BIT MODE						
DMX CHANNEL	12 Group MODE	6 Group MODE	4 Group MODE	3 Group MODE	2 Group MODE	1 Group MODE
1	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Master Intensity
2	Color Presets	Color Presets	Color Presets	Color Presets	Color Presets	Color Presets
3	Strobe	Strobe	Strobe	Strobe	Strobe	Strobe
4	Duration	Duration	Duration	Duration	Duration	Duration
5	Timing	Timing	Timing	Timing	Timing	Timing
6	Control	Control	Control	Control	Control	Control
7	Red_1	Red_1-2	Red_1-3	Red_1-4	Red_1-6	Red_1-12
8	Green_1	Green_1-2	Green_1-3	Green_1-4	Green_1-6	Green_1-12
9	Blue_1	Blue_1-2	Blue_1-3	Blue_1-4	Blue_1-6	Blue_1-12
10	White_1	White_1-2	White_1-3	White_1-4	White_1-6	White_1-12
11	Red_2	Red_3-4	Red_4-6	Red_5-8	Red_7-12	
12	Green_2	Green_3-4	Green_4-6	Green_5-8	Green_7-12	
13	Blue_2	Blue_3-4	Blue_4-6	Blue_5-8	Blue_7-12	
14	White_2	White_3-4	White_4-6	White_5-8	White_7-12	
15	Red_3	Red_5-6	Red_7-9	Red_9-12		
16	Green_3	Green_5-6	Green_7-9	Green_9-12		
17	Blue_3	Blue_5-6	Blue_7-9	Blue_9-12		
18	White_3	White_5-6	White_7-9	White_9-12		
19	Red_4	Red_7-8	Red_10-12			
20	Green_4	Green_7-8	Green_10-12			
21	Blue_4	Blue_7-8	Blue_10-12			
22	White_4	White_7-8	White_10-12			
23	Red_5	Red_9-10				
24	Green_5	Green_9-10				
25	Blue_5	Blue_9-10				
26	White_5	White_9-10				
27	Red_6	Red_11-12				
28	Green_6	Green_11-12				
29	Blue_6	Blue_11-12				
30	White_6	White_11-12				
31	Red_7					
32	Green_7					
33	Blue_7					
34	White_7					
35	Red_8					
36	Green_8					
37	Blue_8					
38	White_8					
39	Red_9					
40	Green_9					
41	Blue_9					
42	White_9					
43	Red_10					
44	Green_10					
45	Blue_10					
46	White_10					
47	Red_11					
48	Green_11					
49	Blue_11					
50	White_11					
51	Red_12					
52	Green_12					
53	Blue_12					
54	White_12					

Note:
Refer to previous DMX mapping information for Color Presets, Strobe, Duration, Intensity Timing, Color Timing, and Control channels.

5. HSIC Mode

Table 7 provides DMX channel mapping of all DMX512 control values when the SL BAR 640 RGBW LED Luminaire is in HSIC (Hue, Saturation, Intensity, and Color Correction) DMX512 mode (as set by the luminaire's menu system).

Table 7: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (HSIC Mode)

DMX Channel	Parameter	Range DMX	Range%	**Default** - *recommended console default values*	Description
1	Master Intensity	0 - 255	0 - 100%	0	8-bit control for Intensity of LED settings.
2	Strobe	0 - 255	0 - 100%	0	*Controls strobe operations as follows:* Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 128 - 129 Pulse + Med Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 192 - 193 Pulse - Med Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
3	Duration	0 - 255	0 - 100%	0	Strobe Duration is 0 - 85 0 = DMX 0 1 = DMX 1 - 3 x = (DMX Value-1)/3+1 85 = DMX 253-255
4	Timing	0 - 255	0 - 100%	255	Allows for timing control of intensity and color parameters. Channel should default to 255 for smoothest actions using console and/or manual fades.
5	Control	0 - 255	0 - 100%	0	*Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds, then turn to 0. Set control channel value to 0 without any scaling.* Default Setting on Console = DMX 0-4 DIM Response _Normal = DMX 5 - 9 DIM Response_Incandescent = DMX 10 - 14 Dimming Curve_linear = DMX 30 - 34 Dimming Curve_Square = DMX 35- 39 Dimming Curve_S-Curve = DMX 40 - 44 Dimming Curve_PL-Curve = DMX 45 - 49 Calibration_OFF = DMX 70 - 74 Calibration_ON = DMX 75 - 79 Fan_Auto = DMX 80 - 84 Fan_Off = DMX 85 - 89 Reserved (Future use) = DMX 90 - 250
6	Hue 1-12, High Byte	0 - 65535	0 - 100%	0	16-bit control of Hue 0 - 359^{o}
7	Hue 1-12, Low Byte				
8	Saturation 1-12	0 - 255	0 - 100%	0	8-bit control of Saturation.
9	Intensity 1-12	0 - 255	0 - 100%	0	8-bit control for Intensity.
10	CCT 1-12	0 - 255	0 - 100%	0	*Variable control of correlated color temperature as follows:* Channel OFF (disabled) DMX 0 - 5 2700K - 6500K. DMX 6 - 255

6. HSIC Group Modes

Table 4 provides DMX channel mapping of all DMX512 control values when the SL BAR 640 RGBW LED Luminaire is operated in various HSIC DMX512 Group Control Modes.

Table 8: SL BAR 640 RGBW LED Luminaire DMX Channel Mapping (HSIC Group Modes)

	HSIC MODE					
DMX CHANNEL	12 Group MODE	6 Group MODE	4 Group MODE	3 Group MODE	2 Group MODE	1 Group MODE
1	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Master Intensity	Master Intensity
2	Strobe	Strobe	Strobe	Strobe	Strobe	Strobe
3	Duration	Duration	Duration	Duration	Duration	Duration
4	Timing	Timing	Timing	Timing	Timing	Timing
5	Control	Control	Control	Control	Control	Control
6	Hue_1 - High Byte	Hue_1-2 - High Byte	Hue_1-3 - High Byte	Hue_1-4 - High Byte	Hue_1-6 - High Byte	Hue_1-12 - High Byte
7	Hue_1 - Low Byte	Hue_1-2 - Low Byte	Hue_1-3 - Low Byte	Hue_1-4 - Low Byte	Hue_1-6 - Low Byte	Hue_1-12 - Low Byte
8	Saturation_1	Saturation_1-2	Saturation_1-3	Saturation_1-4	Saturation_1-6	Saturation_1-12
9	Intensity_1	Intensity_1-2	Intensity_1-3	Intensity_1-4	Intensity_1-6	Intensity_1-12
10	CCT_1	CCT_1-2	CCT_1-3	CCT_1-4	CCT_1-6	CCT_1-12
11	Hue_2 - High Byte	Hue_3-4 - High Byte	Hue_4-6 - High Byte	Hue_5-8 - High Byte	Hue_7-12 - High Byte	
12	Hue_2 - Low Byte	Hue_3-4 - Low Byte	Hue_4-6 - Low Byte	Hue_5-8 - Low Byte	Hue_7-12 - Low Byte	
13	Saturation_2	Saturation_3-4	Saturation_4-6	Saturation_5-8	Saturation_7-12	
14	Intensity_2	Intensity_3-4	Intensity_4-6	Intensity_5-8	Intensity_7-12	
15	CCT_2	CCT_3-4	CCT_4-6	CCT_5-8	CCT_7-12	
16	Hue_3 - High Byte	Hue_5-6 - High Byte	Hue_7-9 - High Byte	Hue_9-12 - High Byte		
17	Hue_3 - Low Byte	Hue_5-6 - Low Byte	Hue_7-9 - Low Byte	Hue_9-12 - Low Byte		
18	Saturation_3	Saturation_5-6	Saturation_7-9	Saturation_9-12		
19	Intensity_3	Intensity_5-6	Intensity_7-9	Intensity_9-12		
20	CCT_3	CCT_5-6	CCT_7-9	CCT_9-12		
21	Hue_4 - High Byte	Hue_7-8 - High Byte	Hue_10-12 - High Byte			
22	Hue_4 - Low Byte	Hue_7-8 - Low Byte	Hue_10-12 - Low Byte			
23	Saturation_4	Saturation_7-8	Saturation_10-12			
24	Intensity_4	Intensity_7-8	Intensity_10-12			
25	CCT_4	CCT_7-8	CCT_10-12			
26	Hue_5 - High Byte	Hue_9-10 - High Byte				
27	Hue_5 - Low Byte	Hue_9-10 - Low Byte				
28	Saturation_5	Saturation_9-10				
29	Intensity_5	Intensity_9-10				
30	CCT_5	CCT_9-10				
31	Hue_6 - High Byte	Hue_11-12 - High Byte				
32	Hue_6 - Low Byte	Hue_11-12 - Low Byte				
33	Saturation_6	Saturation_11-12				
34	Intensity_6	Intensity_11-12				
35	CCT_6	CCT_11-12				
36	Hue_7 - High Byte					
37	Hue_7 - Low Byte					
38	Saturation_7					
39	Intensity_7					
40	CCT_7					
41	Hue_8 - High Byte					
42	Hue_8 - Low Byte					
43	Saturation_8					
44	Intensity_8					
45	CCT_8					
46	Hue_9 - High Byte					
47	Hue_9 - Low Byte					
48	Saturation_9					
49	Intensity_9					
50	CCT_9					
51	Hue_10 - High Byte					
52	Hue_10 - Low Byte					
53	Saturation_10					
54	Intensity_10					
55	CCT_10					
56	Hue_11 - High Byte					
57	Hue_11 - Low Byte					
58	Saturation_11					
59	Intensity_11					
60	CCT_11					
61	Hue_12 - High Byte					
62	Hue_12 - Low Byte					
63	Saturation_12					
64	Intensity_12					
65	CCT_12					

Note:
Refer to previous DMX mapping information for Color Presets, Strobe, Duration, Intensity Timing, Color Timing, and Control channels.

7. SL BAR 640 RGBW LED Luminaire DMX Timing Channel Detail

Timing channel control improves the timed moves of certain groups of parameters. The SL BAR 640 RGBW LED Luminaire provides timing channels in 16-bit mode (one for intensity time and one for color time) and one timing channel in 8-bit (color and intensity timing combined). The luminaire uses its timing channel value to calculate a smooth continuous operation for a given time and transition.

Guidelines:

- Timing channels support time values from zero to 60 minutes.
- To use a timing channel instead of console timing, it is recommended to set the timing channel to the desired value and set cue and/or console cue fade time to zero. A combination of time controls can produce unexpected results.
- The default value setting in the profile should be 255 (proportional control) to allow smooth operation when using console timing.
- The timing channel data should change as a snap. A zero value will give the fastest operation, however, without any smoothing this can appear "steppy" in console timed moves.

Refer to "SL BAR 640 RGBW LED Luminaire DMX Timing Channel Detail" for more information.

Table 9: SL BAR 640 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds *(unless noted)*
0	0	0 (Full Speed)
	1	0.2
	2	0.4
1	3	0.6
	4	0.8
2	5	1
	6	1.2
	7	1.4
3	8	1.6
	9	1.8
4	10	2
	11	2.2
	12	2.4
5	13	2.6
	14	2.8
6	15	3
	16	3.2
	17	3.4
7	18	3.6
	19	3.8
8	20	4
	21	4.2
	22	4.4
9	23	4.6
	24	4.8
10	25	5
	26	5.2
	27	5.4
11	28	5.6
	29	5.8
	30	6
12	31	6.2

Table 9: SL BAR 640 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds *(unless noted)*
	32	6.4
13	33	6.6
	34	6.8
	35	7.0
14	36	7.2
	37	7.4
15	38	7.6
	39	7.8
	40	8
16	41	8.2
	42	8.4
17	43	8.6
	44	8.8
	45	9
18	46	9.2
	47	9.4
19	48	9.6
	49	9.8
	50	10
20	51	10.2
	52	10.4
	53	10.6
21	54	10.8
	55	11
22	56	11.2
	57	11.4
	58	11.6
23	59	11.8
	60	12
24	61	12.2
	62	12.4
	63	12.6
25	64	12.8
	65	13
26	66	13.2
	67	13.4
	68	13.6
27	69	13.8
	70	14
28	71	14.2
	72	14.4
	73	14.6
29	74	14.8
	75	15
30	76	15.2
	77	15.4
	78	15.6
31	79	15.8
	80	16
	81	16.2
32	82	16.4

Table 9: SL BAR 640 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds *(unless noted)*
	83	16.6
33	84	16.8
	85	17
	86	17.2
34	87	17.4
	88	17.6
35	89	17.8
	90	18
	91	18.2
36	92	18.4
	93	18.6
37	94	18.8
	95	19
	96	19.2
38	97	19.4
	98	19.6
39	99	19.8
	100	20
	101	21
40	102	22
	103	23
	104	24
41	105	25
	106	26
42	107	27
	108	28
	109	29
43	110	30
	111	31
44	112	32
	113	33
	114	34
45	115	35
	116	36
46	117	37
	118	38
	119	39
47	100	40
	121	41
48	122	42
	123	43
	124	44
49	125	45
	126	46
	127	47
50	128	48
	129	49
51	130	50
	131	51
	132	52
52	133	53

Table 9: SL BAR 640 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds *(unless noted)*
	134	54
53	135	55
	136	56
	137	57
54	138	58
	139	59
55	140	60
	141	61
	142	62
56	143	63
	144	64
57	145	65
	146	66
	147	67
58	148	68
	149	69
59	150	70
	151	71
	152	72
60	153	73
	154	74
	155	75
61	156	76
	157	77
62	158	78
	159	79
	160	80
63	161	81
	162	82
64	163	83
	164	84
	165	85
65	166	86
	167	87
66	168	88
	169	89
	170	90
67	171	91
	172	92
68	173	93
	174	94
	175	95
69	176	96
	177	97
	178	98
70	179	99
	180	100
71	181	101
	182	102
	183	103
72	184	104

Table 9: SL BAR 640 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds *(unless noted)*
	185	105
73	186	106
	187	107
	188	108
74	189	109
	190	110
75	191	111
	192	112
	193	113
76	194	114
	195	115
77	196	116
	197	117
	198	118
78	199	119
	200	100
79	201	121
	202	122
	203	123
80	204	124
	205	125
81	206	126
	207	127
	208	128
82	209	129
	210	130
	211	131
83	212	132
	213	133
84	214	134
	215	135
	216	136
85	217	137
	218	138
86	219	139
	220	140
	221	141
87	222	142
	223	143
88	224	144
	225	145
	226	146
89	227	147
	228	148
	229	149
90	230	150
	231	151
91	232	152
	233	153
	234	154
92	235	155

Table 9: SL BAR 640 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds *(unless noted)*
	236	156
93	237	157
	238	158
	239	159
94	240	160
	241	161
95	242	162
	243	163
	244	164
96	245	165
	246	5 Minutes
97	247	15 Minutes
	248	30 Minutes
	249	60 Minutes
98	250*	60mS
	251*	80mS
99	252*	100mS
	253*	100mS
	254*	140mS
100	255* (default)	160mS

Note: * DMX values 250 to 255 provide smoothing when using console fade timing. DMX value 255 (recommended default) will provide the smoothest timing.

8. SL BAR 640 RGBW LED Luminaire RDM Parameter IDs

The following tables outline and describe all the RDM parameters IDs associated with SL BAR 640 RGBW LED Luminaires.

- Table 10, "SL BAR 640 RGBW LED Luminaire RDM Product Parameters IDs"
- Table 11, "SL BAR 640 RGBW LED Luminaire RDM UID"
- Table 12, "SL BAR 640 RGBW LED Luminaire RDM Parameters IDs"
- Table 13, "SL BAR 640 RGBW LED Luminaire RDM Manufacturer Status IDs," on page 34
- Table 14, "SL BAR 640 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Root Device," on page 34
- Table 15, "SL BAR 640 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Sub Device," on page 34

Table 10: SL BAR 640 RGBW LED Luminaire RDM Product Parameters IDs

Model ID	Manufacturer	Model Description	Product Category
0x1138	Philips Entertain. Lighting Asia	SL BAR 640 (RGBW)	0x0509

Table 11: SL BAR 640 RGBW LED Luminaire RDM UID

UID					
MSB of ESTA 50H	LSB of ESTA 41H	1st of Unique Seq.	2nd of Unique Seq.	3rd of Unique Seq.	4th of Unique Seq.

Table 12: SL BAR 640 RGBW LED Luminaire RDM Parameters IDs

Get Allowed	Set Allowed	RDM Parameter IDs	Value	Comment	Implemented
Category - Network Management					
		DISC_UNIQUE_BRANCH	0x0001		■
		DISC_MUTE	0x0002		■
		DISC_UN_MUTE	0x0003		■
■		PROXIED_DEVICES	0x0010		
■		PROXIED_DEVICES_COUNT	0x0011		
■	■	COMMS_STATUS	0x0015		
Category - Status Collection					
■		QUEUED_MESSAGE	0x0020		■
■		STATUS_MESSAGES	0x0030		■
■		STATUS_ID_DESCRIPTION	0x0031		■
	■	CLEAR_STATUS_ID	0x0032		■
■	■	SUB_DEVICE_STATUS_REPORT_THRESHOLD	0x0033		
Category - RDM Information					
■		SUPPORTED_PARAMETERS	0x0050	*Support required only if supporting Parameters beyond the minimum required set.*	■
■		PARAMETER_DESCRIPTION	0x0051	*Support required for Manufacturer-Specific PIDs exposed in SUPPORTED_ PARAMETERS message.*	■
Category - Product Information					
■		DEVICE_INFO	0x0060		■

Table 12: SL BAR 640 RGBW LED Luminaire RDM Parameters IDs

Get Allowed	Set Allowed	RDM Parameter IDs	Value	Comment	Implemented
■		PRODUCT_DETAIL_ID_LIST	0x0070		
■		DEVICE_MODEL_DESCRIPTION	0x0080		■
■		MANUFACTURER_LABEL	0x0081		■
■	■	DEVICE_LABEL	0x0082		■
■	■	FACTORY_DEFAULTS	0x0090		
■		LANGUAGE_CAPABILITIES	0x00A0		
■	■	LANGUAGE	0x00B0		
■		SOFTWARE_VERSION_LABEL	0x00C0		■
■		BOOT_SOFTWARE_VERSION_ID	0x00C1		
■		BOOT_SOFTWARE_VERSION_LABEL	0x00C2		
Category - DMX512 Setup					
■	■	DMX_PERSONALITY	0x00E0		■
■		DMX_PERSONALITY_DESCRIPTION	0x00E1		■
■	■	DMX_START_ADDRESS	0x00F0	*Required if device uses a DMX Slot*	■
■		SLOT_INFO	0x0120		■
■		SLOT_DESCRIPTION	0x0121		■
■		DEFAULT_SLOT_VALUE	0x0122		
Category - Sensors 0x02xx					
■		SENSOR_DEFINITION	0x0200		■
■	■	SENSOR_VALUE	0x0201		■
	■	RECORD_SENSORS	0x0202		
Category - Dimmer Settings 0x03xx - FUTURE USE					
Category - Power / Lamp Settings 0x04xx					
■	■	DEVICE_HOURS	0x0400		
■	■	LAMP_HOURS	0x0401		
■	■	LAMP_STRIKES	0x0402		
■	■	LAMP_STATE	0x0403		
■	■	LAMP_ON_MODE	0x0404		
■	■	DEVICE_POWER_CYCLES	0x0405		
Category - Display Settings 0x05xx					
■	■	DISPLAY_INVERT	0x0500		■
■	■	DISPLAY_LEVEL	0x0501		
Category - Configuration 0x06xx					
■	■	PAN_INVERT	0x0600		
■	■	TILT_INVERT	0x0601		
■	■	PAN_TILT_SWAP	0x0602		
■	■	REAL_TIME_CLOCK	0x0603		
Category - Control 0x10xx					
■	■	IDENTIFY_DEVICE	0x1000		■
	■	RESET_DEVICE	0x1001		
■	■	POWER_STATE	0x1010		
■	■	PERFORM_SELFTEST	0x1020		

Table 12: SL BAR 640 RGBW LED Luminaire RDM Parameters IDs

Get Allowed	Set Allowed	RDM Parameter IDs	Value	Comment	Implemented
■		SELF_TEST_DESCRIPTION	0x1021		
	■	CAPTURE_PRESET	0x1030		
■	■	PRESET_PLAYBACK	0x1031		

Table 13: SL BAR 640 RGBW LED Luminaire RDM Manufacturer Status IDs

Manufacturer Specific messages are in the range of 0x8000 - 0xFFDF. Each Manufacturer-specific Status ID shall have a unique meaning, which shall be consistent across all products having a given Manufacturer ID. See Table B-2, ANSI E1.20-2010.				
Status ID Message	**Value**	**Data Value 1**	**Data Value 2**	**Status ID Description**
8100H		00H	00H	ALL OK

Table 14: SL BAR 640 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Root Device

Get Allowed	Set Allowed	RDM Parameter IDs	Type	Length	Unit	Prefix	Min	Max	Default	Description
Category - Manufacturer Defined PIDs - Range is 0x8000-0xffdf (See ANSI E1.20-2010 Standard, Table A-3)										
■	■	8A00H	U8	1	None	None	0	100	100	DIMMER
■	■	8AB2H	U8	1	None	None	1	18	1	Chase
■	■	8AB0H	U8	1	None	None	0	43	0	Color Filter
■	■	8AB1H	U8	1	None	None	0	31	0	Preset
■	■	8A92H	U8	1	None	None	0	255	0	Strobe
■	■	8A94H	U8	1	None	None	0	255	0	Duration
■	■	8AC0H	U8	1	None	None	0	255	255	Intensity Timing
■	■	8AC2H	U8	1	None	None	0	255	255	Color Timing
■	■	8A40H	U8	1	None	None	0	1	0	Link Mode
■	■	8A42H	U8	1	None	None	0	1	0	Incandescent Effect
■	■	8AA1H	U8	1	None	None	0	3	0	Dimming Curve
■	■	8A0CH	U8	1	None	None	0	3	0	DMX Fail Mode
■	■	8AA0H	U8	1	None	None	0	4	0	Backlight Off Time
■	■	8AA2H	U8	1	None	None	0	94	0	Power Up Setup
■	■	8A44H	U8	1	None	None	0	1	0	Calibration ON/OFF Setup
■	■	8A41H	U8	1	None	None	0	1	0	Lock Fixture

Table 15: SL BAR 640 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Sub Device

Get Allowed	Set Allowed	RDM Parameter IDs	Type	Length	Unit	Prefix	Min	Max	Default	Description
Category - Manufacturer Defined PIDs - Range is 0x8000-0xffdf (See ANSI E1.20-2010 Standard, Table A-3)										
■	■	8A04H	U8	1	None	None	0	100	100	Dimmer RED
■	■	8A05H	U8	1	None	None	0	100	100	Dimmer GREEN
■	■	8A06H	U8	1	None	None	0	100	100	Dimmer BLUE
■	■	8A07H	U8	1	None	None	0	100	100	Dimmer WHITE

CLEANING AND CARE

WARNING! All cleaning should be performed with power completely removed from the luminaire. Never remove protective covers when luminaire is powered. Wear appropriate protective eye wear and gloves when cleaning the fixture. All service and maintenance, other than described herein, should be performed by a qualified technician or Authorized Service Center.

1. Special Cleaning and Care Instructions

Being a solid-state fixture, and unlike most fixtures, the SL BAR 640 RGBW LED Luminaire requires very little routine maintenance by the user. This section covers portions of the luminaire that can be removed for cleaning.

The SL BAR 640 RGBW LED Luminaire special care when it comes to cleaning front lens assembly. Additional care needs to be taken with the plastic components because they are much easier to scratch or damage than glass.

The following is a list of cleaning materials required to care for your SL BAR 640 RGBW LED Luminaire:

- Lint free lens tissue
- Lint or powder free gloves
- Reagent grade isopropyl alcohol*
- A mild soap solution.

Note: *Reagent grade isopropyl alcohol is good to use on the SL BAR 640 RGBW LED Luminaire plastic optics with anti-reflection coatings.

If the lens is still dirty after using isopropyl alcohol, for instance if fingerprints or oil is just redistributed and not cleaned off the optic, then a mild soap and water solution can be used to gently wash the lens. Repeat the cleaning with isopropyl alcohol to eliminate streaks and soap residue.

WARNING! Under no circumstances should ammonia-based cleaners, acetone, or other harsh solvents be used on or near the SL BAR 640 RGBW LED Luminaire. These types of cleaners or solvents can permanently damage the optics or housings of the fixture.

If you have any questions regarding the use or care of your SL BAR 640 RGBW LED Luminaire, please contact Showline technical support or your local Authorized Dealer.

2. Front Lens Cleaning

To clean the front lens:

Step 1. Disconnect luminaire from power and allow to cool completely.

Step 2. Apply a small amount of reagent grade isopropyl alcohol to lint-free lens tissue.

Step 3. Wipe all debris, dirt, fingerprints, etc. from lens.

Step 4. Using a second lint-free lens tissue, wipe off any alcohol residue.

3. Service and Maintenance

For all other service and maintenance issues, please contact your local Showline office or an Authorized Service Center.

WARNING! Disassembly (other than as described herein), alterations, unauthorized service, etc. will void the product warranty. Contact your local Showline office or an Authorized Service Center for technical support and service.

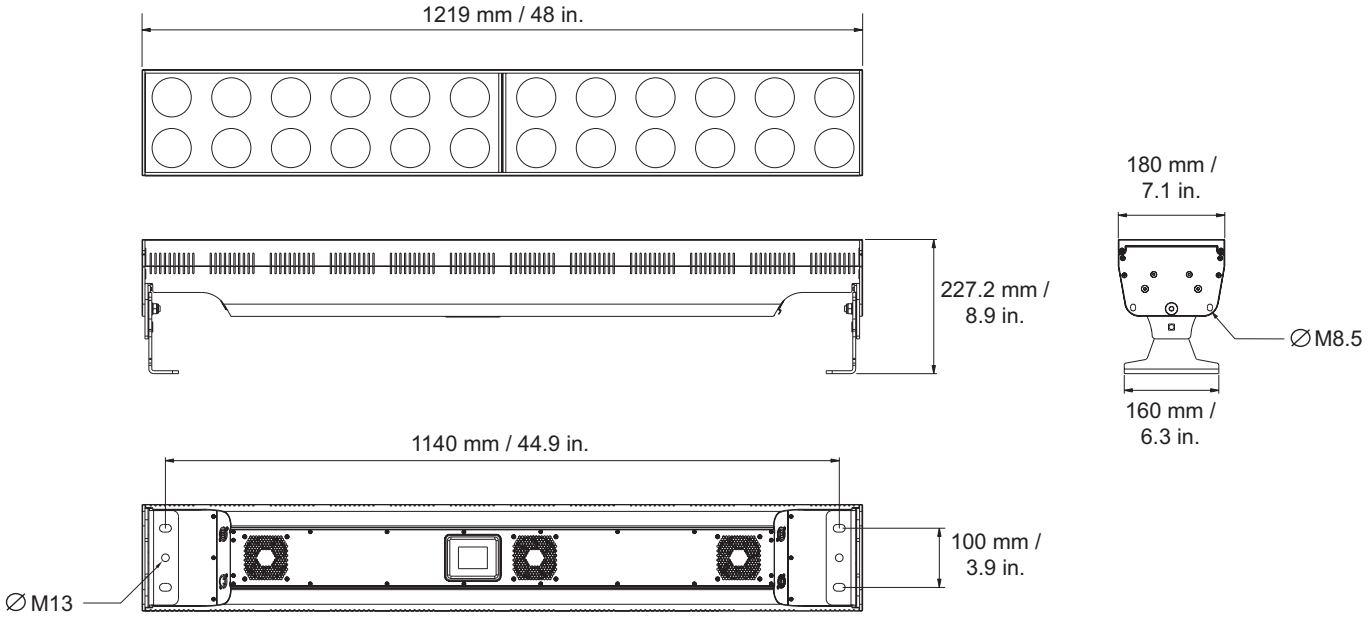
TECHNICAL SPECIFICATIONS

1. SL BAR 640 RGBW LED Luminaire Operational Specifications

Source:	RGBW LED Array (x192 - 48 Red / 48 Green / 48 Blue / 48 White - all 600 mA)
Beam Angle:	60 Degrees
Light Output:	> 13,360 lumens
Color Temperature:	2700 - 10000K (user adjustable)
Input Voltage (AC):	100V to 240V (+/- 10%, auto-ranging)
Current (AC):	5.0 Amps (100V) / 2.1 Amps (240V)
Frequency:	50/60Hz
Control Protocols:	DMX512 (1990) / DMX512A (RDM) / On-Board Menu
Ambient Temperature:	-20 to 40 Degrees C (-4 to 104 Degrees F)
Humidity:	5%-95% Non condensing
Cooling:	Forced Air Cooling
Weight:	39.6 lbs (18 kg) - Luminaire only (no accessories)
Housing:	Die Cast Aluminium with Powder Coating
Compliance:	cETLus marked (North American models) and CE Marked (International models)
IP Rating:	IP20

Note: Common model specifications shown. For specific model specifications, features, and accessories, refer to the product specification sheet for more details.

2. SL BAR 640 RGBW LED Luminaire Dimensions



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